

# Humanitarian Design For Refugee Camps: Design Solutions in Crisis Situations

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## Abstract

Unrest and strife in the world leads to humanitarian crises that can be political, economic or religious. As people flee under stress to refugee camps, these camps are ill equipped for the realities of living that, while meant to be temporary, often become permanent home to thousands, indeed millions of people. In considering these inhumane conditions of living (author 2, 2014), a humanitarian design approach works for men, women and children under duress and in critical situations.

These issues are examined in the context of a design workshop developed within a theory course on light and colour, exploring humanitarian design for a refugee camp from the perspective of visual sense-making (Van Patter & Pastor, 2014) and humanitarian approaches (Author, 2013). We present what happens when two seemingly divergent concepts come together: examining design solutions for a humanitarian crisis, and doing so using light, colour and form as foundational elements. Students are exposed to severe contexts and learn to apply theoretical concepts to practical issues. Design learning in this context engages students in issues of ethics and sustainability from perspectives of problem-based learning and understanding humanitarian, social, cultural, theoretical or practical contexts from multiple perspectives, thus becoming an agent of change.

## Key words

Humanitarian design, transformational change, light and colour, design process

## Introduction

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These issues are examined in the context of a design workshop developed within a theory course on light and colour, exploring humanitarian design for a refugee camp from the perspective of visual sense-making (Van Patter & Pastor, 2014) and humanitarian approaches (Author, 2013). We present what happens when two seemingly divergent concepts come together: examining design solutions for a humanitarian crisis, and doing so using light, colour and form as foundational elements for design concepts and solutions that work in response to the crisis situation. From the perspective of both design and architecture and with the exposure to a visiting international professor for the project during the course, students work in small teams to research the issues, examine potential design possibilities and proposes solutions within a humanitarian design workshop. Students are exposed to severe contexts and learn to

apply theoretical concepts to practical issues. Design learning in this context engages students in issues of ethics and sustainability from perspectives of problem-based learning and understanding humanitarian, social, cultural, theoretical or practical contexts from multiple perspectives, thus becoming an agent of change. Examples of projects show how design can be a catalyst to solving issues and provide viable solutions that have potential in this dire situation.

## The Issues and Contexts

Students in design programs in North America have traditionally been taught design thinking and processes using contemporary approaches to theory, history and process usually within a local and Western context. Recently design curriculums in interior design and architecture have broadened to include complex thinking strategies, sustainable approaches and temporal considerations of time and space as these relate to technological advances or issues with aging populations. However, less evident is design aimed at humanitarian crises that is relevant to the people who are increasingly living in these dire situations. As of late 2014, the world population in refugee camps has reached 45.2 million, is increasing rather than decreasing, and the ravages of war and world strife lead to both displacement and an increase in refugees seeking asylum around the world.

This is a world crisis and refugees are in a crisis situation, with the impact severe for them, along with the economic and political unrest and consequences that emerge when people are being displaced not only temporarily, but increasingly for long periods of time. Temporary refugee camps have become permanent homes while war rages around people living essentially in tents, regardless of weather conditions and human conditions. In terms of the people living in these situations, there are entire families at risk and in particular children who account for an increasing percentage of people in refugee situations, and often orphans living with severe personal traumas. With the most recent severe winter conditions adding to the difficulties, families are in need more than ever before (Unicef, 2015). These conditions are tragic and increasingly more difficult.

## A Humanitarian Design Approach : From Design to Humanitarian Design

With this world crisis situation in mind, designing may be understood as frivolous when considered from the more traditional aesthetic context. Conversely, designing can be put to use as a proactive and positive tool when the contexts within people live are understood and when transformative, creative and innovative solutions can be sought out to alleviate these dire and difficult living situations. Considering transformative approaches to support people's lived situations is ever more vital. A humanitarian design approach works for men, women and children under duress and in critical situations.

### ***Putting theory into practice: Refugee camps in Jordan***

Two professors, one from Montreal and the other in Paris, got together to consider how students in design might think about the humanitarian crisis in Syria and how they could learn how to put design thinking and concept development to work both using a complexity of context of the crisis and also their design skills applied to a real world situation. This workshop was created as

a 5 week exercise for students in a theory class, where the course professor and the invited architect-researcher professor developed this workshop to allow students to apply theoretical ideas within a design studio problem context, engaging theory with practice. The site considered was a refugee camp in Jordan, about 20 km from the Syrian border. Refugees have been suffering the Syrian civil war for over 3 years and in 2012 the number of refugees at the camp was estimated between 160,000 – 360,000 and growing ( Author 2).

The idea was to bring together design thinking and doing with the humanitarian crisis, investigate the issues using a short term workshop format to engage students and to provide catalysts to designing under pressure with short visits from the overseas professor and the local professor providing a facilitating team.

### ***Why a humanitarian design approach ?***

Given the context of political strife and the political, economical and religious contexts, humanitarian design can afford possibilities and practical solutions for daily living issues and to provide hope for those who are suffering. As Author 2 suggests in his workshop proposal : *Design can (and should) provide a way out – be responsible and human, by integrating ecological, social ethical and political responses using design tools as the catalyst for solutions that are ecological, ethical and economically and locally viable.*

Humanitarian design is thus not only at the service of urgent needs of men, women and children, all survivors living in critically unsafe spaces, but also carries a responsibility afford solutions in ways that transcend the living situations of those in need by offering alternatives and possibilities. Humanitarian design offers innovative solutions by inventing new alternatives, and as Nelson & Stolterman suggest « ....create transformative change ...» (2013)

### ***The design approach: Visual sense-making using form, light, colour and ethical approaches***

The added context proposed for this workshop was an emphasis of design possibilities using form, colour and light as catalysts. Students were not limited to these concepts, but as the workshop occurred in a theory course about “Colour and Light in Interior Spaces”, students were asked to reflect theoretically and practically on how they could design using these elements to solve this humanitarian problem, thus bringing together seemingly divergent concepts, yet using tangible design elements to create viable and thoughtful solutions. In particular, the design process was one of context situating, concept development for real-world problem-solving and from the perspective both visual sense-making (Van Patter & Pastor, 2014).

Furthermore, and from an ethical perspective, students were asked to consider these design elements using the principles of universal design (Lidwell et al, 2003), understanding design “for the other 90%” and in the context of designing for real world situations (Papanek, 1984; Cooper Hewitt Museum, 2015; Author 2 2013). Students were also asked to consider light and form as ways of providing shadow and light from an intimate human perspective (Tanizaki, 1977) while answering to very serious and real issues of security and comfort in an alien environment. Intimate issues of security for basics such as self-hygiene, providing children with ways to change their crisis situation, and providing small ideas to make large changes in the lived situations were all aspects discussed.

## The Workshop: The project, the approach and the objectives

The workshop unfolded over two sessions – first, in Phase 1, a visit from the professor architect who provided the issues presented to the students, and the preparation that they would need to do for the workshop when he returned in a couple of months. Second, the students, in groups of two, had to both research the issues and consider potential concepts and possibilities during the visiting professors' absence. Third, in Phase 2, the visiting professor returned for two classes and the final presentation (spread over 3 weeks), during which students were to develop concept ideas, provide maquettes (real or virtual) of proposed concepts for approval, and then present the concepts in a concise format in class to a jury acting as a potential client.

### *The workshop approach*

The workshop objectives included getting students engaged and to open their thinking about the value of design in the conception of design solutions from a humanitarian perspective. To do so, the visiting architect professor (Author 2) provided students with exposure to the « real terrain » of a refugee camp, multiple perspectives. Precedents were explored and students were asked to explore the issues and contexts at all the stages of a design concept and problem development. They were provided with the complete situation and understanding the people (actors, users, persons in their lived experience) who required support and to develop realistic and innovative concepts for those in severe distress using a precise case study of the Zaatari camp in Jordan.

The workshop unfolded over 2 months within a tight and condensed studio design situation and two phases. In January 2014 students explored contexts, developed an understanding of the problem and situation, and devised early conceptual approaches in teams of 2 or 3 students. Over the next couple of months they developed the concept retained after discussion with the tutors, returning to the final concept and critique with a jury composed of architects and designers and those with experience in the Jordan camps. The top solutions were then presented in a conference on humanitarian design in April 2014. Solutions were to be presented as final concepts in a limited format with concept, technical development and integration within the camp tangibly.

### *The workshop objectives*

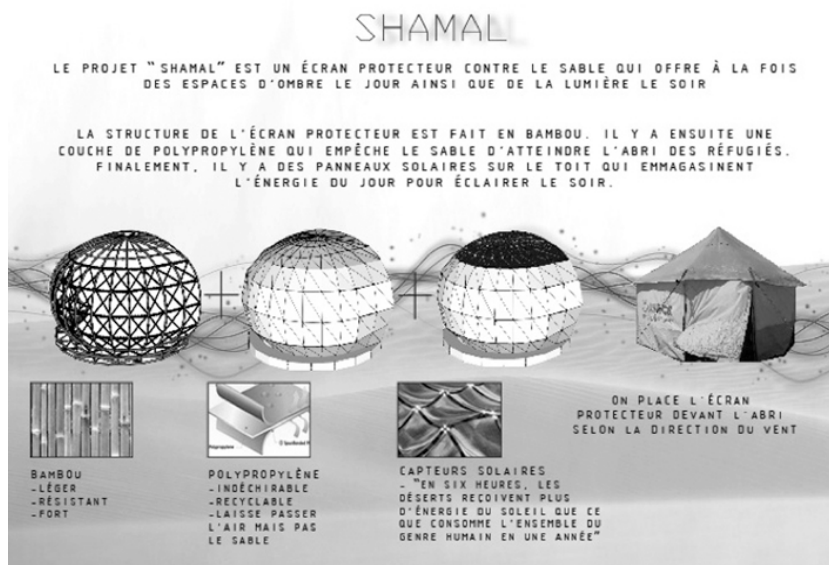
Issues explored included a) how to reconcile post disaster issues alongside the realities and hardships of living in a refugee camp; b) How to see past the limitations and design innovative solutions that use design principles and approaches, and yet where solutions actually solve problems in the contexts of the living conditions of the camps; c) how to use design elements understood theoretically to design solutions for humanitarian purposes; d) how to transcend disciplinary approaches to design spaces, approaches, products and environments or ways to live better in the actual, lived situation.

Students were a) exposed to severe contexts and b) learned during the classes to apply theoretical concepts to practical issues. Design learning in this context engages students in issues of ethics and sustainability from perspectives of problem-based learning and understanding humanitarian, social, cultural, theoretical or practical contexts from multiple perspectives, thus becoming an agent of change.

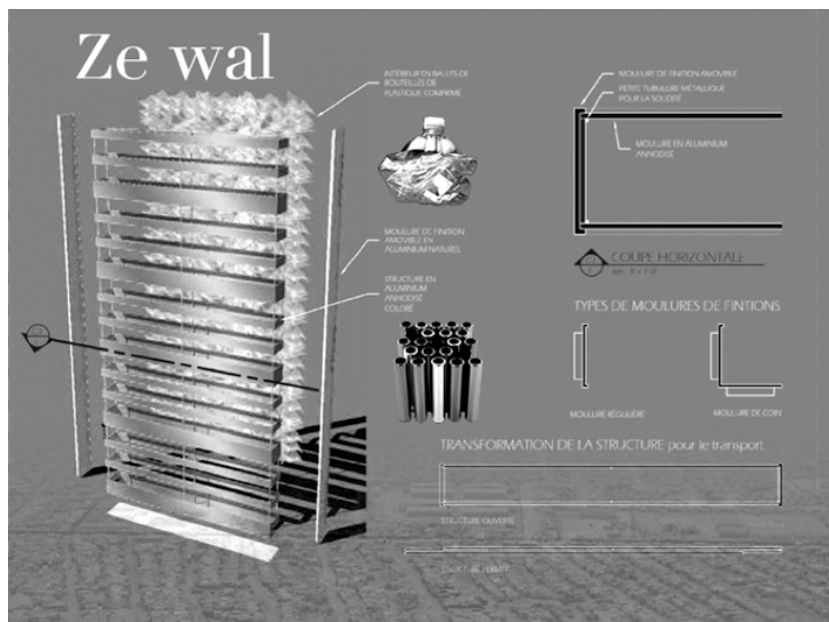
## Student concepts and discussion

Students produced over 50 concepts in two classes, with groups in first year and second year. Each group had a different approach, based somewhat on learning capacities and knowledge in their respective year. Here are two examples of proposed solutions:

### *Student example 1*



### *Student example 2*



Students were engaged and very affected by the issues and create solutions that were thoughtful, innovative and technically possible in the context of the severe conditions of the Jordan desert. Concepts were developed and the overall idea of allowing students to really understand and come to terms with the lived situation of the people in the camps was vital. How to personalize the spaces they were living within, including the tents, the commissary and the temporary pharmacy and schools became important issues. The plight of children particularly hit the students quite hard, and many solutions were developed to try and bring a sense of joy, of childhood, back to those who were not in that type of place, if even temporarily, through the use of LEDs and other current technologies that could be implemented realistically within the camps.

## Conclusion

For design learning to be relevant, students need exposure to design in the real world and design in context. Theory learned without situating the problem in the real situations of the person is useful but generally remains aesthetic rather than viable. Students can be engaged in crisis situations and understand the value of design as a catalyst to solving human problems, while developing innovative and aesthetic solutions with added dimensions that are practically applied. The students in this workshop not only grasped issues unfamiliar to them, they also used their design skills to go beyond standard approaches and applied their thinking in new and innovative ways. Students matured and provided solutions situated in the issues at hand.

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